

1. (Cancelled).

2. (Cancelled).

3. (Cancelled).

4. (Cancelled).

5. (Currently amended). A process ~~as claimed in claim 1~~ wherein the image data ~~relates to an ovine animal carcass and~~ for analysing an ovine animal carcass which includes the steps of:

providing an image capture means for capturing image data relating to an ovine animal carcass,

presenting an ovine animal carcass to the image capture means, the carcass being positioned with the dorsal view of the carcass presented directly to the image capture means,

capturing image data for the dorsal view of the carcass by the image capture means, processing the image data so as to automatically identify predetermined anatomical points of the carcass,

deriving dimensional measurements for the carcass by using the anatomical points identified, and

deriving at least one characterising parameter related to fatness of the carcass by processing colour data included in the captured image data in conjunction with the derived dimensional measurements, the colour data processed being the colour data for at least one predetermined selected surface area of the carcass known or determined to have a significant correlation to the characterising parameter related to fatness, wherein the process includes the further step of processing the image data to identify the tail of the ovine animal carcass, the

identification of the tail comprising identification of lateral edges of the tail which are delineated in the captured image by generally linear darker areas extending lengthwise relative to the spine of the carcass, the process including the further step of determining the width of the tail between the lateral edges, and wherein the step of deriving at least one characterising parameter includes deriving a parameter related to the predicted yield of the carcass using the width of the tail as a variable in a carcass yield predictive equation.

6. (Presently amended) A process as claimed in claim 1 wherein the step of processing colour data comprises measuring the average RGB values representing red, green and blue color components within said at least one predetermined selected surface area.

7. (Original) A process as claimed in claim 6 wherein the RGB values are intensity normalised colour values substantially independent of light intensity.

8. (Presently amended) A process ~~as claimed in claim 6 wherein the image data relates to an ovine animal carcass and~~ for analysing an ovine animal carcass which includes the steps of:

providing an image capture means for capturing image data relating to an ovine animal carcass,

presenting an ovine animal carcass to the image capture means, the carcass being positioned with the dorsal view of the carcass presented directly to the image capture means,

capturing image data for the dorsal view of the carcass by the image capture means,

processing the image data so as to automatically identify predetermined anatomical points of the carcass,

deriving dimensional measurements for the carcass by using the anatomical points identified, and

deriving at least one characterising parameter related to fatness of the carcass by processing colour data included in the captured image data in conjunction with the derived dimensional measurements, the colour data processed being the colour data for at least one predetermined selected surface area of the carcass known or determined to have a significant correlation to the characterising parameter related to fatness, the step of processing colour data comprising measuring the average RGB values representing red, green and blue colour components within said at least one predetermined selected surface area,

wherein there are multiple predetermined selected surface areas of the ovine animal carcass for which colour data is processed, the multiple predetermined surface areas comprising areas which are automatically positioned relative to the predetermined anatomical points and which generally coincide with the chump, the loin and the shoulder areas of the ovine animal carcass used in standardised manual carcass grading systems for evaluating carcass fatness.

9. (Original) A process as claimed in claim 8 wherein the multiple surface areas are arranged in respective pairs located symmetrically on opposite sides of the spine of the carcass, the processing of the coloured data including averaging of colour values for each laterally spaced pair of surface areas.

10. (Original) A process as claimed in claim 9 wherein the processing of colour data for the respective pairs of surface areas includes comparing the average colour values of each surface area with its respective counterpart of the respective pair and generating an alarm or error signal if the average colour values for the two members of any pair vary significant from each other.

11. (Presently amended) A process ~~as claimed in claim 6~~ for analysing an animal carcass which includes the steps of:

providing an image capture means for capturing image data relating to an animal carcass,  
presenting an animal carcass to the image capture means, the carcass being positioned with  
dorsal view of the carcass presented directly to the image capture means, capturing image data  
for the dorsal view of the carcass by the image capture means, processing the image data so as to  
automatically identify predetermined anatomical points of the carcass,

deriving at least one characterising parameter related to fatness of the carcass by  
processing colour data included in the captured image data in conjunction with the derived  
dimensional measurements, the colour data processed being the colour data for at least one  
predetermined selected surface area of the carcass known or determined to have a significant  
correlation to the characterising parameter related to fatness, the step of processing colour data  
comprising measuring the average RGB values representing red, green and blue color  
components within said at least one predetermined selected surface area,

wherein the step of processing the colour data includes analysing the rate of change of RGB values in a line profile across the image of the carcass transverse to the longitudinal line of

the spine and wherein the step of deriving a characterising parameter includes solving a predictive equation for a measure of fatness of the carcass in which the rate of change of the RGB values is a variable in that predictive equation.

12. A process ~~as claimed in claim 6~~ for analysing an animal carcass which includes the steps of:

providing an image capture means for capturing image data relating to an animal carcass, presenting an animal carcass to the image capture means, the carcass being positioned with the dorsal view of the carcass presented directly to the image capture means, capturing image data for the dorsal view of the carcass by the image capture means, processing the image data so as to automatically identify predetermined anatomical points of the carcass,

deriving dimensional measurements for the carcass by using the anatomical points identified, and

deriving at least one characterising parameter related to fatness of the carcass by processing colour data included in the captured image data in conjunction with the derived dimensional measurements, the colour data processed being the colour data for at least one predetermined selected surface area of the carcass known or determined to have a significant correlation to the characterising parameter related to fatness, the step of processing colour data comprises measuring the average RGB values representing red, green and blue colour components within said at least one predetermined selected surface area,

wherein the step of deriving a characterising parameter related to fatness of the carcass includes performing statistical analyses of multiple carcasses to provide correlations between

average RGB values of said at least [predetermined selected surface area and carcass fatness and using these correlations to develop a predictive equation for carcass fatness in which the average RGB values are variables in the predictive equation.

13. (Original) A process as claimed in claim 12 wherein the parameter related to fatness of the carcass is selected from lean meat yield and fat thickness.

14. (Cancelled).

15. (Cancelled).